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Approved by:

Philip Shull U.S. Consulate, Hong Kong

Prepared by: Caroline Yuen

Report Highlights:

Hong Kong appears on the brink of establishing mandatory labeling for biotech foods. Such a step could seriously undermine sales to this 9th largest market for U.S. grocery products, which amounted to about \$610 million in 2006. U.S. products will be impacted because of the cost of labeling and retailers' fear of consumer reaction. The Hong Kong government released a set of guidelines on voluntary labeling for biotech foods last year and will be conducting a survey to evaluate the effectiveness of voluntary labeling. The trade said that there is virtually no positive labeling of biotech foods, given the voluntary nature of the guidelines. While the government has not announced its decision to implement a mandatory labeling scheme, industry sources have said they are certain the HKG is moving in this direction and will use the survey result to support their initiative. Meanwhile, the legislative drafting of the bill for the implementation of Cartagena Protocol has halted pending the Protocol's developments of detailed implementation requirements. Presently, Hong Kong does not have any specific regulation regarding biotech foods.

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Executive Summary

Hong Kong appears on the brink of establishing mandatory labeling for biotech foods. Such a step could seriously undermine sales to this 9th largest market for U.S. grocery products, which amounted to about \$610 million in 2006. U.S. products will be impacted because of the cost of labeling and retailers' fear of consumer reaction.

The Hong Kong government released guidelines on voluntary labeling of biotech foods in July 2006. There has been one year since the release of the guidelines and the Hong Kong government is now preparing to conduct a survey to evaluate the effectiveness of the voluntary labeling. The survey is to be completed before the end of 2007.

Government sources revealed that the Hong Kong government will revisit the biotech food labeling issue after the survey. While the government has not announced its decision to implement a mandatory labeling scheme, industry sources have said they are certain the HKG is moving in this direction because the industry is virtually not practicing any positive labeling for biotech foods. According to the guidelines, the threshold level for labeling purpose is 5 percent and negative labeling is discouraged.

In 2006, the United States exported a total of \$1.14 billion of agricultural and food products to Hong Kong, ranking as the 11th largest U.S. export market. Of the \$1.14 billion of exports, \$610 million were consumer-oriented products. Most of these products will be most likely subject to the impact of mandatory biotech labeling as Hong Kong's labeling policy applies to pre-packaged food only. The voluntary guidelines, which were introduced last year, have not affected U.S. exports to Hong Kong, because of their voluntary nature.

Currently, the Hong Kong government does not have any specific biotechnology regulations with regard to the production or labeling of biotech food products. The Hong Kong government makes no distinction between conventional and biotech foods. All are subject to the same food safety regulation.

In 2003, the Hong Kong government announced its intention to introduce new legislation, which will provide a legal framework for the implementation of the Cartagena Protocol on Biosafety. The Hong Kong government has not set any deadline for the enactment of the new legislation. It also claimed that the future legislation will adhere strictly to the Protocol and would not set any requirements beyond those of the Protocol.

It has been almost four years since the Hong Kong government's announcement of incorporating the Cartagena Protocol on Biosafety by enacting a new legislation. The drafting of the legislation has halted because the Hong Kong government is waiting for Protocol's development on implementation details. Government officials indicated that they will attend the upcoming COP-MOP (Conference of the Parties serving as the Meeting of the Parties) meeting and the future legislation will make close reference from further international development on this subject.

According to the Protocol, Living Modified Organisms (LMOs) even intended for direct use as food or feed, or for processing must fulfill all documentation requirements. For LMOs which are intended for introduction to the environment, the exporting party is required to give advance notification to the competent authority of the importing country and seek its approval in addition to fulfilling all documentation requirements.

Hong Kong does not have any significant agricultural production, nor any production of biotech crops. U.S. exports of agricultural products carrying LMOs for intentionally released to the environment are negligible if any. Hence, Hong Kong's new legislation should not have

any impact on U.S. exports in the context of advance notification. However, the U.S. exports approximately \$13 million worth of corn and soybeans to Hong Kong annually. These products may be subject to documentation requirements covered by the new legislation, if they are biotech modified and are considered "living" depending on the definition of the future legislation.

U.S. Exports of Agricultural and Food Exports to Hong Kong in 2006

Products	US\$ million	% of U.S. total exports	Ranking
Agricultural, Fish & Forestry Total	1,137	1.4%	11
1005 Corn (Maize)	11.9	0.2%	32
Soybeans	1.09	0%	39
Sub-total	12.99	0.09%	
Consumer-Oriented Ag. Total	610	2%	10

Source: U.S. Department of Commerce, Bureau of Census

SECTION II. Biotechnology Trade and Production

Hong Kong does not commercially produce any biotechnology crops, nor does it conduct field trials. There is no law prohibiting biotech crop plantation.

Farming is insignificant in Hong Kong. The land use for vegetable, flower, field crop, and orchard are 320 hectare, 190 hectare, 20 hectare and 280 hectare respectively. The 2006 agricultural production amounted to \$152 million, comprising \$33 million of crop production, \$76 million of livestock production and \$43 million of poultry production. In essence, farming is insignificant with very limited future prospects. The livestock industry is diminishing.

In recent years, the Hong Kong government has been promoting organic farming so as to find a niche market for Hong Kong's grown vegetables amidst the severe competition from imports from China. With the further development of organic farming, an organic certification service company, the Hong Kong Organic Resource Center (HKORC), was established in 2002. HKORC started to provide independent organic certification service in late 2004 for farmers and food processors. By the standard of HKORC, all certified organic products have to be GM free.

As reported in Biotechnology Annual 2006 (HK#6015), biotech papayas were planted by mistake by some organic farmers in Hong Kong in 2005. All the biotechnology production was subsequently eradicated. In 2004 and 2005, the Agriculture, Fisheries and Conservation Department (AFCD) of the Hong Kong government helped local farmers source papaya seeds so as to encourage them to plant papayas. Consequently, a total of about 13 organic farms were involved with approximately 300 papaya trees planted.

Following news in October 2005 that papaya production in Thailand was found to be genetically modified, AFCD and Greenpeace Hong Kong tested locally grown papaya samples to see if they were genetically modified. The results were positive. As a result, all the papaya trees planted were eradicated. AFCD also wrote to farmers in Hong Kong advising them not to plant papayas due to the existence of unknown GM seeds. AFCD revealed that the seeds were sourced from a research institute in Guangdong, a province in China adjacent to Hong Kong. According to the Hong Kong government, the institute reaffirmed that it had

not conducted any GM engineering work on papayas. However, AFCD staff indicated that they discovered the presence of papaya seedlings of unknown sources near the institute's papaya production site.

Subsequently, those organic certified farms which were involved in this case stopped planting papayas in 2006 and 2007 in order to prevent any biotech papaya seeds left over in the land from growing into papayas.

The Hong Kong government also conducted a one-off testing on farm product samples of corn and papayas to see if any farm products in Hong Kong had been contaminated with GM seedlings. The results were negative.

Hong Kong does carry out research on biotech rice at in the Chinese University of Hong Kong. Field trials are conducted in China. One of the research projects is by Professor Samuel Sun, who in co-operation with the National China Hybrid Rice Research & Development Center, conducts research to improve the quality and nutritional value of super hybrid rice by utilizing transgenic plant production methods. According to Professor Sun, 50 percent of rice produced in China is of hybrid type. The yield is 30 percent higher than that of conventional rice. Professor Sun's research project is to improve the lysine content of the super hybrid rice.

On the trade front, Hong Kong import regulations regard biotech products as conventional products. Importers/exporters are not required to make any special declarations if products are of biotech origin. However, all the few major soybean users in Hong Kong specifically request non-GM soybeans because of market-driven factors, particularly if their products are exported to overseas markets. Buyers generally have a wrong perception that soybeans from the U.S. must be of biotech origin. On the other hand, Canadian soybeans of the grade SQWH (Special Quality White Hilum) is very popular among soybean users in Hong Kong. According to importers, these SQWH soybeans are non-GM but there is no identity preservation. In 2006, Hong Kong imported merely 2 percent (\$0.280 million) of its soybean demand from the United States while 92 percent (\$11.3 million) was supplied by Canada.

Hong Kong is not a food aid recipient and is unlikely to be a food aid recipient in the future.

SECTION III. Biotechnology Policy

Presently, Hong Kong does not have any regulatory measures on biotech products. In the area of production or field-testing, there are no special pieces of legislation regulating biotech crops. There is no law prohibiting biotech crop plantation. According to Hong Kong's organic certification scheme, all organic products should not be genetically modified. The certification scheme, however, is voluntary and is not backed legislatively. Neither is there any legislation for the labeling for packaged foods or feeds. Hong Kong does not maintain a list of approved biotechnology crops. Biotech crops can be imported to Hong Kong as conventional crops and are subject to the same legislations.

Government sources revealed that the HKG will review its policy on the labeling of biotech pre-packaged foods and drinks. While the government has not announced its decision to implement a mandatory labeling scheme, industry sources have said they are certain the HKG is moving in this direction.

According to a government proposal in 2003, Hong Kong should adopt voluntary labeling for biotech foods because there is not any international consensus. Subsequently, the government introduced a set of guidelines on voluntary labeling for biotech foods last year. The guidelines have been released for one year and the government is planning to conduct a

survey to evaluate the effectiveness of the guidelines in terms of application. Industry generally felt that positive labeling of biotech foods virtually does not exist. What is applied is negative labeling. This foregone conclusion of the survey is very clear. They worry that the HKG would use the survey result to support their mandatory labeling initiative.

The government also announced in March 2003 its intention to introduce a mandatory premarket safety assessment. However, the government has not announced any time frame as to when this will be implemented. The HKG has not reported on any progress on the development of introducing this pre-market safety assessment. Instead, government representative revealed that they would review this proposal along with labeling.

In 2003, the Hong Kong government also announced its intention to enact a new legislation in order to incorporate the Cartagena Protocol on Biosafety requirements.

Voluntary Labeling

The Food and Health Bureau is the policy bureau responsible for the policy direction over biotech foods. Its executive arm, the Food and Environmental Hygiene Department (FEHD), is the regulatory department for food safety through the Center for Food Safety. Both the pre-market safety assessment and labeling of biotech foods are under the portfolio of the Bureau while the Center for Food Safety is executing the policy decisions of the bureau.

In a proposal submitted to the Hong Kong Legislative Council in 2003, the Hong Kong government announced its intention to launch a program of voluntary labeling for prepackaged food and mandatory pre-market safety assessment requirements for all food products. While the Hong Kong government has not set a date for the implementation of the mandatory pre-market safety assessment, it released the guidelines for voluntary labeling of biotech foods in order to answer the public's call for consumers' right to make an informed choice of biotech foods.

The guidelines were formulated by a working group established under the Center for Food Safety, with members coming from various sectors including manufacturing, wholesale, retail, consumer groups and government departments. The guidelines are advisory in nature and do not have any legal effect. Adoption is entirely voluntary and is not binding. The guidelines apply to prepackaged food.

The guidelines are based on the following four principals.

- The labeling of biotech food will comply with the existing food legislation.
- The threshold level applied in the guidelines for labeling purpose is 5 percent, in respect of individual food ingredient.
- Additional declaration on the food label is recommended when significant
 modifications of the food, e.g. composition, nutrition value, level of anti-nutritional
 factors, natural toxicant, presence of allergen, intended use, introduction of an animal
 gene, etc, have taken place.
- Negative labeling is not recommended.

As the guidelines are voluntary, U.S. food exports should not be affected if they choose not to have any biotech labeling. However, it should be noted that the Hong Kong government does not encourage negative labeling when no biotech counterparts of the respective

products ever exist. Also, the Hong Kong government does not encourage negative labeling using very definite terms such as:

- GMO free,
- Free from GM ingredients, etc

For products with such definite negative labeling, the government may take the initiative to test the products against GM ingredients and a zero tolerance will be adopted for testing purposes. If products are found to have misleading labeling, a retailer may be subject to prosecution under Section 61 – False Labeling and Advertisement of Food or Drugs of Chapter 132 Public Health and Municipal Services Ordinance. (Available at http://www.legislation.gov.hk/eng/home.htm)

If the trade chooses to apply negative labeling, the government advises to use less definite terms such as "sourced from non-GM sources" (which contains less than 5 percent of GM content) and to have documentation to substantiate such declaration.

For more details, please refer to Gain Report HK#6026.

Mandatory Pre-market Safety Assessment

The Hong Kong government plans to introduce legislative measures mandating pre-market safety assessment, according to a proposal delivered to the Legislative Council in 2003. Importers or manufacturers of food containing biotech ingredients would be required to submit documents and certificates to the Food and Environmental Hygiene Department (FEHD) prior to importing the food to Hong Kong, detailing the safety assessments that have been conducted by the developer of the biotech ingredients. The results of evaluations conducted on the ingredients by overseas regulatory authorities would also be submitted for the pre-market safety assessment. FEHD would assess risks associated with toxins, allergies, nutrition, etc., based upon guidelines developed by Codex. Foods containing biotech ingredients that pass the safety assessment could then be sold in Hong Kong.

FEHD would develop a list of approved biotech ingredients based on the applications made by importers and manufacturers. The list would be publicized and updated regularly for public reference. Importers and manufacturers would bear the responsibility of determining whether their products contain only approved biotech ingredients and, if so, whether the foods may be imported without any further safety assessment. For foods containing biotech ingredients not on the approved list, an application to FEHD for pre-market safety assessment would be required.

Regarding products already in the market, FEHD would require importers or manufacturers to provide risk assessment reports if products contain biotech ingredients. Such biotech products could be sold in Hong Kong within a grace period pending document review and approval.

The proposal empowers FEHD to take food samples from the market to periodically test for biotech ingredients. Unapproved biotech products would be required to be removed from the market, and the importers would be prosecuted.

The government has not set a date for the implementation of the mandatory pre-market safety assessment.

Cartagena Protocol on Biosafety

The Environment Bureau takes the lead on the implementation of the Cartagena Protocol on Biosafety. While it is a policy bureau, the technical responsibility lies with the Agriculture, Fisheries and Conservation Department (AFCD). AFCD is primarily responsible to provide infrastructure support services to promote agricultural production and sustainable development of agriculture and fisheries in Hong Kong. In 2002, AFCD created a division called Biodiversity Conservation Division. Among other duties, its role is to prepare Hong Kong to implement the Cartagena Protocol.

Hong Kong at present is not a party of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety. Hong Kong is a Special Administrative Region of China. The application of international agreements to Hong Kong for agreements to which China is a party will be decided by China in accordance with the circumstances and needs of Hong Kong, after seeking the views of the Hong Kong government. China has been a party to the Convention and the Protocol since 1993 and 2005 respectively. The Hong Kong government has obtained the agreement-in-principle of China to extend the application of both the Convention and the Protocol to Hong Kong when it is adequately prepared. In essence, the Protocol was not extended to Hong Kong simultaneously upon China's ratification of the Protocol in 2005.

With this background, the Hong Kong government first announced its intention to apply for the extension of the Cartagena Protocol in late 2003. The Hong Kong Government had sent delegates to attend the Protocol's COP-MOP (Conference of the Parties serving as the Meeting of the Parties) as part of China's delegation to keep track of the development. Government officials revealed that they plan to take into account the developments of the Protocol when drawing up the detailed regulatory framework for implementing the Protocol in Hong Kong. The drafting of the legislative work has halted. The government officials explained that they need to make reference from Protocol's implementation details, which have yet to be discussed by members. According to the officials, Hong Kong's future requirements will be in line with and would not be more or less stringent than those stipulated by the Protocol. They indicated that they will send representatives to attend the upcoming COP-MOP meeting and keep themselves abreast of the developments. According to the published information, the future legislation will encompass the following key provisions.

- a) Establishment of a licensing system for the Agriculture, Fisheries and Conservation Department (AFCD) to process applications for first imports of LMOs (Living Modified Organisms) into Hong Kong for intentional introduction into the environment in accordance with the Advance Informed Agreement (AIA) procedure of the Protocol;
- b) A requirement that an exporter in Hong Kong shall send a notification enclosing the risk assessment report to the competent authority of the importing party and obtain its prior consent for the export of the LMO for first intentional introduction into the environment at the importing end;
- c) A requirement that approval shall be obtained from AFCD prior to the domestic use or export of a locally developed LMO for intentional introduction into the environment or for direct use as food, feed or for processing;
- d) Documentation requirements on trans-boundary movements of LMOs;
- e) Penalties for violation of the import, export or documentation requirements set out in (a) to (d) above;

- f) Other miscellaneous matters including designation of the Director of AFCD as the competent authority to discharge the Protocol's obligations in Hong Kong; and
- g) Implementation of measures to fulfill obligations under the Protocol following future decisions made by Parties to the Protocol, e.g. setting standards for the identification, handling, packaging and transport of LMO.

SECTION IV. Marketing Issues

The green groups and consumer organizations are key parties in Hong Kong advocating mandatory labeling of biotech foods. Their rationale is based on consumers' right to know. The safety issue is not their major argument. The request of green groups and consumer organizations has gained support of certain Legislative Council (Legco) members. In January 2000, Legco adopted a motion to "draw on the experience of most member states of the European Union and expeditiously legislate for a labeling system" and to "conduct strict examinations and tests" on biotech foods. On June 2003, Legco passed a motion calling on the government to expeditiously establish a "voluntary first, and then mandatory" approach to a labeling system for biotech foods.

However, the food industry is generally opposed to mandatory labeling of biotech foods on the grounds that it would limit the choices of consumers, reduce variety of food supplies to Hong Kong and add burden to consumers and the industry alike.

On the whole, general consumers do not have a concern whether food contains biotech ingredients. In recent years, there are not any strong voices in public urging the Hong Kong government to adopt mandatory labeling for biotech foods. Prices and nutritional values are of bigger concern in general. However, local food processors would specify the use of non-biotech soybeans particularly if their products are exported overseas.

SECTION V. Capacity Building and Outreach

There are no U.S. government funded outreach activities carried out in Hong Kong that relate to agricultural biotechnology.